

DNA Model Project

Objective:

To create an accurate model of a DNA Molecule.

Instructions:

You must create a 3D model of DNA. It may either stand free on its own or be hung from the ceiling. You may construct the model out of any materials that you choose (examples include candy, pasta, beads, marshmallows, or beans). The model must accurately show the following:

1. One complete spiral of DNA (15 base pairing of nitrogen bases)
2. Correct Base pairing (A-T, C-G)
3. The sugar-phosphate backbone
4. Hydrogen bonds connecting the 2 strands.
5. A reference sheet explaining the parts of the DNA Spiral.

Use this as a guideline to make sure your project is done correctly. This rubric is yours to keep.

_____ Reference Sheet (with names clearly printed)

_____ 15 base pairs minimum

_____ Adenine bonded to thymine

_____ Cytosine bonded to guanine

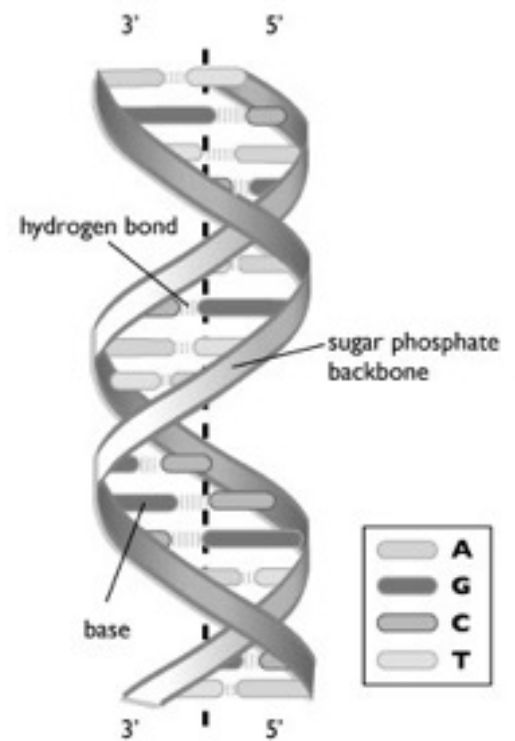
_____ Hydrogen bond between base pairs

_____ Sides of alternating deoxyribose/phosphate groups

_____ Base pairs connect to deoxyribose

_____ DNA model is 3-D

_____ Shows double helix shape



Grading:

3 out of 9 requirements met: 1

4- 5 requirements met: 2

6- 7 requirements met: 3

All 9 requirements met: 4